

Workgroup Consultation			
<p><b>CMP368: Updating Charges for the Physical Assets Required for Connection, Generation Output and Generator charges for the purpose of maintaining compliance with the Limiting Regulation</b></p> <p><b>CMP369: Consequential changes to Section 14 of the CUSC as a result of the updated definitions introduced by CMP368</b></p> <p><b>CMP368:</b> To give effect to the Authority determination within the CMP317/327 decision published to amend the definition of Assets Required for Connection, create new definitions of 'GB Generation Output' and define Generator charges for use in the Limiting Regulation range calculation.</p> <p><b>CMP369:</b> To update CUSC with the updated definitions introduced by CMP368 and update the GCharge element to facilitate the removal of 'Large Distributed Generators' charges from the compliance calculation as directed by the Authority.</p>	<p><b>Modification process &amp; timetable</b></p> <ol style="list-style-type: none"> <li>1 <b>Proposal Form</b> 16 April 2021</li> <li>2 <b>Workgroup Consultation</b> 11 June 2021 – 02 July 2021</li> <li>3 <b>Workgroup Report</b> 22 July 2021</li> <li>4 <b>Code Administrator Consultation</b> 02 August 2021 – 23 August 2021</li> <li>5 <b>Draft Modification Report</b> 26 August 2021</li> <li>6 <b>Final Modification Report</b> 10 September 2021</li> <li>7 <b>Implementation</b> 01 April 2022</li> </ol>		
<p><b>Have 5 minutes?</b> Read our <a href="#">Executive summary</a></p> <p><b>Have 20 minutes?</b> Read the full <a href="#">Workgroup Consultation</a></p> <p><b>Have 30 minutes?</b> Read the full Workgroup Consultation and Annexes.</p>			
<p><b>Status summary:</b> The Workgroup are seeking your views on the work completed to date to form the final solution(s) to the issue raised.</p>			
<p><b>This modification is expected to have a: High impact on those CUSC Users who pay TNUoS charges.</b></p>			
<b>Governance route</b>	This modification will be assessed by a Workgroup and Ofgem will make the decision on whether it should be implemented.		
<b>Who can I talk to about the change?</b>	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><b>Proposer:</b> James Stone, National Grid ESO <a href="mailto:James.Stone@nationalgrideso.com">James.Stone@nationalgrideso.com</a></p> <p>Phone: 07971002704</p> </td> <td style="width: 50%; vertical-align: top;"> <p><b>Code Administrator Chair:</b> Jennifer Groome <a href="mailto:Jennifer.Groome@nationalgrideso.com">Jennifer.Groome@nationalgrideso.com</a></p> <p>Phone: 07966130854</p> </td> </tr> </table>	<p><b>Proposer:</b> James Stone, National Grid ESO <a href="mailto:James.Stone@nationalgrideso.com">James.Stone@nationalgrideso.com</a></p> <p>Phone: 07971002704</p>	<p><b>Code Administrator Chair:</b> Jennifer Groome <a href="mailto:Jennifer.Groome@nationalgrideso.com">Jennifer.Groome@nationalgrideso.com</a></p> <p>Phone: 07966130854</p>
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<b>How do I respond?</b>	Send your response proforma to <a href="mailto:cusc.team@nationalgrideso.com">cusc.team@nationalgrideso.com</a> by 5pm on 2 July 2021.		

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## Executive summary

Following the Authority's approval of the CMP317/327 Original Proposal, changes to the CUSC TNUoS charging methodology from 1 April 2022 are now required to ensure alignment with the Authority's decision.

### What is the issue?

**CMP368:** The required changes to CUSC Section 11 include, in the assessment of compliance with the range, local charges in respect of local assets to the extent that such assets were pre-existing at the time the generator paying those charges wished to connect to the NETS. A further change to the CUSC is also required to facilitate the Authority's decision to remove charges and volumes associated with Large Distributed Generators from the calculation determining compliance with the range.

**CMP369:** Section 14 of the CUSC needs to be updated to ensure that Generation Output, Generator charge variables and the definition of Charges for Physical Assets Required for Connection used within the methodology for assessing compliance with the Limiting Regulation are aligned with the definitional changes introduced by CMP368.

### What is the solution and when will it come into effect?

**Proposer's solution:** Updates to Section 11 and Section 14 of CUSC as outlined above.

**Implementation date:** 1 April 2022.

#### Summary of potential alternative solution(s) and implementation date(s):

- To exclude only the volumes associated with Large Distributed Generators from the compliance calculation, rather than excluding both the charges and the volumes as proposed in the Original Solution. (1 April 2022)
- A variation on the treatment of transmission charges paid by generators for power station demand. (1 April 2022)
- A combination of the above two. (1 April 2022)
- Utilise data that already exists within the onshore TOs' Price Control Finance Models (PCFM) to derive a portion of total onshore local charges associated with non pre-existing assets. (1 April 2022)

### What is the impact if this change is made?

This change will have a high impact on those CUSC Users who pay TNUoS charges.

### Interactions

CMP368 and its proposed definition changes has an interaction with CMP369 which is being proposed alongside this modification and that updates Section 14 of the CUSC to align the charging methodologies to the updated definitions.

These modifications are not expected to impact on the EBGL Article 18 T&Cs

## What is the issue?

### Proposer's View

**CMP368:** To maintain compliance with Regulation 838/2010 (the Limiting Regulation), NGENSO perform a compliance assessment to ensure that the average annual transmission charge for all Generators is set within a range of €0-2.50/MWh when setting tariffs and that if this is not met an ex-post reconciliation process is performed to amend charges for Generators.

The Limiting Regulation specifies that “Charges for Physical Assets Required for Connection” (amongst others) are excluded when assessing compliance. These are currently expressed within the “Charges for Physical Assets Required for Connection” (the ‘Connection Exclusion’) definition in Section 11 of the CUSC.

The definition within the CMP317/327 Original Proposal approved by the Authority on 17 December 2020, excludes all local charges for local circuits and local substations paid by Generators when assessing compliance with the range in the Limiting Regulation. However, as part of their decision<sup>1</sup> the Authority stated, “We consider that charges paid by generators in relation to Local Assets which existed at the point at which such generator(s) wished to connect to the NETS do not fall within the Connection Exclusion”.

In the decision, the Authority made it clear that they expected the ESO to bring forward a modification proposal to include, in the assessment of compliance with the range, local charges in respect of local assets (i.e. local substations and local circuits) to the extent that such assets were pre-existing at the time the Generator paying those charges wished to connect to the National Electricity Transmission System (NETS).

In addition, the Authority also expected any CUSC modification proposal(s) to remove from the calculation determining compliance with the range the TNUoS Charges payable by Large Distributed Generators and their associated volumes (MWh).

**CMP369:** CMP369 has been drafted to give effect to this direction and to refer to the definitions introduced in CMP368 which introduce definitions of these terms.

### Why change?

Following the Authority's approval of CMP317/327 'Original Proposal', changes to the CUSC TNUoS charging methodology from 1 April 2022 are now required to ensure alignment with the Authority's decision to include, in the assessment of compliance with the range, local charges in respect of local assets to the extent that such assets were pre-existing at the time the generator paying those charges wished to connect to the NETS.

This interpretation was reinforced following the CMA decision regarding the recent 'SSE Code Modifications Appeal 2021'<sup>2</sup> whereby the CMA clarified (within paragraphs 6.91) the principles governing the correct interpretation of the “Connection Exclusion”, stating:

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<sup>1</sup> [https://www.ofgem.gov.uk/system/files/docs/2020/12/cmp317327\\_decision\\_171220.pdf](https://www.ofgem.gov.uk/system/files/docs/2020/12/cmp317327_decision_171220.pdf)

<sup>2</sup> [https://assets.publishing.service.gov.uk/media/60632cd6d3bf7f0c8c97d9f2/SSE\\_v\\_GEMA\\_-\\_pdf](https://assets.publishing.service.gov.uk/media/60632cd6d3bf7f0c8c97d9f2/SSE_v_GEMA_-_pdf)

*“6.91 (d) The reference in the Connection Exclusion to ‘the system’ means the transmission system as it exists at the point that a new Generator wishes to be connected to it. We also note the following:*

- (i) For the purposes of the application of the ITC Regulation [this is the Limiting Regulation] in GB, ‘the system’ is ‘the transmission system of Great Britain’.*
- (ii) Currently, the entire GB transmission system comprises the NETS. For so long as that remains the case, treating the NETS as ‘the system’ is correct (see paragraph 2.8).*
- (iii) In terms of the relevant point in time at which the determination should be made as to which Local Assets are considered ‘pre-existing’ (that is, part of the NETS), we note that GEMA’s initial view was that the date of execution of the contracts between NGESO and the relevant Generator would be a reasonable proxy as to when a Generator wished to connect. This initial view was not specifically challenged in the present appeal and therefore we do not need to decide this point.*

*(e) When deciding whether or not a charge falls within the Connection Exclusion, it is necessary to ask whether the physical asset to which it relates is ‘required for connection’ by the Generator in question to ‘the system’ as it exists at that point. That is the same as asking whether, ‘but-for’ the asset, the Generator would be connected to the system.*

*(f) The physical assets which are determined to fall within the Connection Exclusion for a Generator continue to be required by that Generator for connection to the pre-existing system even once the Generator is operational. Put another way, connecting equipment for a Generator continues after the initial act of connecting to be ‘required for connection to the system’. For the purposes of a Generator, the ambit of ‘the transmission system’ does not widen immediately upon the act of connecting that Generator.*

In the decision above the CMA specify that the “system” for the purposes of the Limiting Regulation is the NETS and that charges for connections to this system should be considered “Charges for Physical Assets Required for Connection”. However, the Proposer considers that it is clear that the system should be considered at the point that a Generator wishes to connect. This aligns with the direction given in Ofgem’s CMP317/327 decision letter and means that charges for local assets which existed at the point at which such Generator(s) wished to connect to the NETS do not fall within the Connection Exclusion.

**CMP369:** Following the Authority’s approval of CMP317/327 ‘Original Proposal’, changes to the CUSC TNUoS charging methodology from 1 April 2022 are now required to ensure alignment with the Authority’s decision to remove from the calculation determining compliance with the range the TNUoS Charges payable by ‘Large Distributed Generators’ and their associated volumes. To facilitate this, Section 14 of the CUSC needs to be updated to ensure that Generation Output, Generator charge variables and the definition of Charges for Physical Assets Required for Connection used within the methodology for assessing compliance with the Limiting Regulation are aligned with the definitional changes introduced by CMP368.

## What is the solution?

### **Proposer's solution**

#### **CMP368**

CMP368 seeks to:

- Amend the definition of “Charges for Physical Assets Required for Connection” (which determines the scope of the “Connection Exclusion”) to exclude local charges for pre-existing assets, and;
- Exclude TNUoS Charges and volumes associated with TNUoS-liable Distributed Generators who are party to a Bilateral Embedded Generation Agreement and are Licensable Generation.

#### **Amend the definition of “Charges for Physical Assets Required for Connection”**

A change to Section 11 of the CUSC is required to exclude from the definition of “Charges for Physical Assets Required for Connection” charges for those assets that were pre-existing at the time the generator wished to connect. This will reflect the Authority interpretation that charges paid by generators in relation to local assets which existed at the point at which such generator(s) wished to connect to the NETS do not fall within the Connection Exclusion, thus allowing NGENSO to include local charges related to such pre-existing assets, in the assessment of compliance with the Limiting Regulation range.

It is proposed that those assets which should be regarded as ‘pre-existing’ local assets would be determined by reference to the assets that existed as at the date of the Bilateral Connection Agreement for those generators who wished to connect to the National Electricity Transmission System. This will then allow the timestamping of assets to the associated Generator and/or TEC values (for Onshore) to be identified.

In terms of assessing which assets are physical assets required for connection and to facilitate the Authority's CMP317/327 decision and translate its interpretation into the CUSC definition of the Connection Exclusion, it is proposed that the solution should consider, amongst other elements suggested via any Workgroup discussion:

- TNUoS local charges with respect to transmission infrastructure assets which were built (or upgraded) as “enabling works” for the relevant generator(s);
- The treatment of local charges for offshore assets and specifically the treatment of offshore interlinks;
- Trigger events such as increases in TEC; reduction in TEC or closure of a generating unit(s);
- Clusters of generators for the purpose of upgrades to the system and associated local circuits and substations;
- Generator “splits” whereby part of a generation unit is sold or transferred to another party and subsequently requires a new Bilateral Connection Agreement between NGENSO and the Generator; and
- The treatment of negative local circuit tariffs.

Note: the proposed solution does not currently consider potential changes to the local charging methodology driven by future integrated offshore networks given that there



remains significant uncertainty regarding how this regime may work. As such it is proposed that this will be dealt with via a separate modification as and when required.

Any definition should preclude 'shared/shareable' local assets as the Authority interpretation already considers charges relating to such assets to be included within the Connection Exclusion. However, the Workgroup should consider both energisation status and asset redundancy and the appropriate way to include this in the assessment of compliance.

### **Exclude TNUoS Charges and volumes associated with TNUoS-liable Distributed Generators who are party to a Bilateral Embedded Generation Agreement and are Licensable Generation**

In addition to updating the definition of "Charges for Physical Assets Required for Connection", a further change to Section 11 of the CUSC is also required to define the 'Generation Output' element used within the charging methodology calculation to determine compliance with the range. It is proposed that this definition would be total Output of GB generation liable for the TNUoS generation charge, excluding the associated volumes (MWh) relating to TNUoS-liable Distributed Generators who are party to a Bilateral Embedded Generation Agreement and are Licensable Generation.

Furthermore, Section 11 of the CUSC will also require a change to define the forecast generator revenue and actual charge elements used within the charging methodology calculation specifically ensuring that Large Distributed Generator Charges are not considered as per Ofgem's CMP317/327 decision.

### **CMP369**

The CMP369 proposal is to update the definition of 'GO' and 'GOa' (used within the calculation detailed within Section 14.14.5 and 14.17.37 of the CUSC for the purpose of compliance with the Limiting Regulation) to align with the definition of GB Generation Output introduced by CMP368.

Additionally, propose to update the legal text relating to 'GCharge' (used within the same calculations and sections of the CUSC) to adopt the definitions of 'Forecast Transmission Generator TNUoS Charges' and 'Actual Transmission Generator TNUoS Charges' also introduced via CMP368. This will then allow NGENSO to facilitate the Authority's CMP317/327 decision by removing from the calculation determining compliance with the range those volumes and charges associated with Large Distributed Generators and to take into account charges for pre-existing assets in tariff setting and any ex-post reconciliation processes.

This Proposal will affect the overall level that Generators and Suppliers pay for their Transmission Network Use of System (TNUoS) charges by incorporating the definitions within CMP368 thereby altering the amount that the Adjustment Tariff for Generators and residual charge for Suppliers recovers.

## Workgroup considerations

The Workgroup convened four times to discuss the perceived issue, detail the scope of the proposed defect, devise potential solutions and assess the proposal in terms of the Applicable Code Objectives.

Before discussing the Proposer's solution, the Authority Representative provided the Workgroup with guidance, (which can be found in Annex 3) on the Authority's expectations regarding the scope of CMP368 and CMP369. The Authority Representative stated that this guidance is to mitigate any risk that the modification process could result in no proposals being developed that are fully aligned with the correct interpretation of the Limiting Regulation, as occurred in CMP317/327.

The Authority Representative noted that this guidance has also been provided to help reduce any perceived requirement for industry to develop multiple alternative proposals, providing for different outcomes.

To aid their understanding, the Workgroup discussed a number of High Level Principles, covering various scenarios in relation to how assets would be categorised, for example when they would/would not fall within the Connection Exclusion, and how the associated charges would be derived. These are included in Annex 7.

The Workgroup discussed the Terms of Reference provided by the Panel and agreed to an amendment to take into account the CMA's decision<sup>3</sup> of 30 March 2021 on the SSE appeal.

## **Section 11 - Definitional Changes proposed by CMP368**

### **Large Distributed Generators**

The Proposer stated that they have interpreted the [CMP317 & CMP327](#) Ofgem decision to mean that a further change is required to *"Remove from the calculation determining compliance with the range the TNUoS Charges payable by 'Large Distributed Generators' and their associated volumes"*.

The Proposer considers that, in practice, this means that both the TNUoS charges and the volumes associated with TNUoS-liable Distributed Generators who are party to a Bilateral Embedded Generation Agreement and are Licensable Generation should not be considered when calculating compliance with the Limiting Regulation.

The Proposer worked out the overall impact that this removal would have on the revenue liable for consideration in the calculation of compliance with the Limiting Regulation.

(£m)	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Revenue from large embedded generation	6.01	7.09	7.50	9.18	9.11	9.30

<sup>3</sup> [https://assets.publishing.service.gov.uk/media/60632cd6d3bf7f0c8c97d9f2/SSE\\_v\\_GEMA\\_-\\_pdf](https://assets.publishing.service.gov.uk/media/60632cd6d3bf7f0c8c97d9f2/SSE_v_GEMA_-_pdf)



However, a Workgroup member noted that the approach suggested by the Proposer for the charges paid by TNUoS-liable Distributed Generators did not comply with the wording in the Limiting Regulation, namely:

*“Annual average transmission charges paid by producers is annual total transmission tariff charges paid by producers divided by the total measured energy injected annually by producers to the transmission system of a Member State”<sup>4</sup> [emphasis added]*

Therefore, the Workgroup member suggested that it would be necessary for an alternative to be raised to ensure that only the charges were included when the ESO calculating compliance with the statutory range, but the volumes were not as the energy from distribution connected generation was not injected to the transmission system.

**Workgroup Consultation Question:** The Proposer is proposing that the both the volumes and charges of Large Distributed Generators are excluded in the compliance calculation, whereas the potential alternative proposes that only the volumes are excluded. Which option do you support and why?

A Workgroup member noted that it will also be necessary when assessing compliance with the Limiting Regulation that NGENSO ensures that the ‘*annual total transmission tariff charges paid by producers*’ includes all the transmission charges paid by Generators in GB, which includes station demand TNUoS charges. See annex 4 for more information.

**Workgroup Consultation Question:** Station demand charges (TNUoS Triad charges on power station demand) would, with the original, be excluded, however the potential alternative would include them. Which option do you support and why?

It was queried by a Workgroup member whether the ESO are obligated to publish the calculation/data to determine compliance with the Limiting Regulation. The Proposer confirmed that this was not an obligation, rather it is Ofgem who were required previously to report annually which used data provided by the ESO in that particular report.

It was highlighted by a Workgroup member and confirmed by the Proposer that data relating to the compliance calculation had previously been shared with industry by the ESO at the Transmission Charging Methodology Forum (TCMF). As such the Proposer considered that the suggestion by a Workgroup member to change the legal text to obligate the ESO to publish the calculation/data determining compliance was not necessary given it is already being provided. The Proposer also noted that the primary purpose of this modification was to facilitate the Authority’s CMP317/327 decision regarding the inclusion of pre-existing assets in the assessment of compliance and the removal of TNUoS charges payable by Large Distributed Generators and their associated volumes.

A Workgroup member is considering a potential alternative to require the ESO to publish the calculation/data for determining compliance with the Limiting Regulation, to aid transparency. This is because without visibility of the calculation there is no evidence that the ESO has complied with the Direction or Limiting Regulation.

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<sup>4</sup> Limiting Regulation, Part B paragraph 2.

## **Charges for Physical Assets Required for Connection**

It was noted by the Workgroup that the 'Connection Exclusion' has been defined, within the Limiting Regulation, as:

*"Charges paid by producers for physical assets required for connection to the system or the upgrade of the connection"<sup>5</sup>.*

The Proposer stated that Ofgem have specified that charges for "pre-existing" assets (PEA) should not fall within the 'Connection Exclusion' when assessing compliance with the Limiting Regulation.

The Proposer considers "pre-existing" to mean the date when a generator signs its Bilateral Connection Agreement (BCA) with NGENSO, and that the charges for those local assets that form part of the pre-existing NETS should therefore be included in the assessment of compliance with the Limiting Regulation; and therefore local charges associated with those pre-existing assets will not be part of the 'Connection Exclusion'.

This approach would also require the ESO to determine the charges for those local assets that were Non Pre-Existing Assets (NPEA). A Workgroup member believed this should include taking account of those Post-BCA Assets (i.e. those assets not forming part of the BCA signed by the generator with NGENSO, that are built after the date when the generator signs its BCA). Another Workgroup member wondered if such assets should be considered an "upgrade of the connection" notwithstanding that the upgrade was not triggered by that generator, but instead by another generator, because the wording in the Limiting Regulation refers to "the connection" not "their connection".

A Workgroup member challenged what is meant by the term 'producer' and 'generator' in this context. It was confirmed by the Proposer and another Workgroup member that the definition of 'producer' is not defined in the Regulation 838/2010<sup>6</sup>, however it is defined in Directive 2009/72/EC<sup>7</sup>, where producer is defined in Article 2 as "*a natural or legal person generating electricity*". It was also noted that during the latest (2021) and previous (2018) CMA appeal decisions relating to the Limiting Regulation that Ofgem, the appellants and the CMA have all agreed that the term 'producer' and 'generator' are one and the same.

The Workgroup also examined the CUSC in terms of storage and confirmed that storage which generates electricity is classed as a generator, regardless of whether or not it holds a Generator Licence. The Proposer shared with the Workgroup Ofgem's 'Decision on clarifying the regulatory framework for electricity storage: changes to the electricity generation licence'<sup>8</sup> (published October 2020) which states:

*"Alongside government, we have clarified our view that in the energy system, storage provides services equivalent to generation. Therefore, our view is that*

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<sup>5</sup> Limiting Regulation, Part B paragraph 2(1)

<sup>6</sup> <https://www.legislation.gov.uk/eur/2010/838/contents/adopted>

<sup>7</sup> <https://www.legislation.gov.uk/eudr/2019/944/article/2>

<sup>8</sup> [Decision on clarifying the regulatory framework for electricity storage: changes to the electricity generation licence \(ofgem.gov.uk\)](https://www.ofgem.gov.uk/decision-on-clarifying-the-regulatory-framework-for-electricity-storage-changes-to-the-electricity-generation-licence)

*electricity storage – for licensing purposes - should be treated as electricity generation."*

The Workgroup considered the definitions that may be applicable following the CMA decision and the adoption of the relevant EU legislation into GB legislation. Specifically, the definitions applicable for licenced generation and clarification of producer, generator and energy storage as set out in the recast electricity directive 2019/944<sup>9</sup>. The distinction between different types of storage and treatment with the CUSC, Grid Code and RFG was also briefly touched upon. It was also noted that Regulation (EU) 2019/943<sup>10</sup> establishes that 'network charges shall not discriminate either positively or negatively against energy storage'.

A Workgroup member questioned if the proposal affected how storage would be treated when assessing compliance with the Limiting Regulation. The Proposer noted that they are not proposing to amend the existing treatment of charges and volumes related to transmission connected storage assets i.e. storage in a transmission connected power station is treated the same way as other generating units and as such the associated charges and exporting volumes are included for the purpose of the compliance assessment. Therefore, as now, the transmission charges paid by pump storage and other storage like, for example, batteries and the associated volumes will be included (rather than excluded) when undertaking the Compliance Calculation.

**Workgroup Consultation Question:** The Original proposal would not change the current treatment of transmission charges or the associated volumes relating to storage when assessing compliance with the Limiting Regulation. Do you agree with this approach, and if so why?

**Workgroup Consultation Question:** Do you believe that both generation charges and volumes of storage assets should be included in the compliance calculation (page 11)? Does this depend on whether the storage is transmission or distribution connected? Please provide your rationale.

A Workgroup member questioned what counts as the signing of the BCA agreement, in terms of whether this is the date when the generator and ESO enter into the relevant BCA agreement or when they sign the offer. The Authority Representative confirmed that in the Authority's view it is the date when the BCA is signed.

A Workgroup member also challenged what happens with the agreements which have not yet been signed, however TO investment plans have been either already designed, or already approved by the Authority (and thus the associated local assets could therefore be considered as 'pre-existing' and not required for the connection of the individual generator in question).

**Workgroup Consultation Question:** What do you think is the appropriate time stamp for defining whether a network asset is "pre-existing" (page 11)? E.g. when a generator wished to connect, was the network asset:

- a. Already planned to be built

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<sup>9</sup> <https://www.legislation.gov.uk/eudr/2019/944/article/2>

<sup>10</sup> <https://www.legislation.gov.uk/eur/2019/943/contents>

- b. Already committed to be built
- c. Already under construction
- d. Finished construction
- e. Commissioned and fully operational

The Proposer confirmed that from the BCA documentation the ESO would be able to determine the necessary enabling works associated with a generator. This could allow the ESO to assess what element of the local charges were PEA or NPEA.

However, a Workgroup member noted that where those works (such as Shared Secured Enabling Works) were not for assets required for a generators' connection then they should not be placed into the 'Connection Exclusion' as they did not meet the autonomous test set by the CMA.

The Authority Representative provided the Workgroup with their view on what they interpret 'Connection Exclusion' to mean:

*“Connection Exclusion is that charges paid by a generator fall within the Connection Exclusion if they are for assets that were required to connect that generator to the system, as the system existed at the time when the generator wished to connect, or for the upgrade of that connection. In this context we consider the system to be the ‘NETS’.”*

Currently it is the case that charges for offshore assets are associated with a specific project, until there are integrated offshore systems, and the Proposer considers there are currently no pre-existing assets to consider other than any existing interlinks; however, it was noted by the Workgroup this may change in the medium term with, for example, the ongoing Offshore Transmission Network Review being undertaken jointly by BEIS, and Ofgem.

Charges for onshore assets need to be assessed against an updated definition of Charges for Physical Assets Required for Connection to ensure that these are appropriately accounted for in the calculation of compliance.

The Proposer provided the below estimates of the additional revenue that would be captured at the point of tariff setting based on the Proposers' interpretation of the PEA charges and the inclusion of those charges in the compliance calculation.

	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Revenue from local charges associated with pre-existing assets (indicative) (£m)	1.6*	1.94*	2.10*	3.69*	18.42*	19.27*

\* Based on an “anchor project”, i.e. local charges for sole users are connection exclusion; if multiple projects are in the same local network, assuming the one with the highest TEC triggered the local assets and thus pay connection exclusion.

The Proposer provided a spreadsheet to explain how the compliance calculation is calculated. This can be found in Annex 6.

**Pre-existing Assets: Areas to Consider**

<b><u>Area for consideration</u></b>	<b><u>Proposer View</u></b>	<b><u>Workgroup Member(s) View(s)</u></b>
TNUoS local charges with respect to transmission infrastructure assets which were built as “enabling works” for the relevant generator(s);	Enabling works by definition appear to not be pre-existing as they would not be needed but for that connection.	Some of the enabling works may not be required for the connection of a generator (so should not be within the ‘Connection Exclusion’) which means the ESO needs to assess each situation on a case by case (or rather BCA by BCA) basis.
The treatment of local charges for offshore assets and specifically the treatment of offshore interlinks;	Offshore assets are not pre-existing as they are required for a specific generator other than interlinks which would need to be considered on the basis of the generator that drove the investment.	The Workgroup agreed that charges for offshore assets are generally associated with a specific project and that until either (i) there are integrated offshore systems or (ii) an interlink is built the Workgroup consider there to be no pre-existing assets to consider (other than any existing interlinks).
Trigger events such as increases in TEC; reduction in TEC or closure of a generating unit(s);	Any changes in TEC should only drive a change to consideration of pre-existing if it results in additional reinforcement or system build. Only the incremental reinforcement should be considered connection exclusion.	
Upgrades to the system and associated local circuits and substations for single generators or clusters of generators;	Pre-existing assets will exist where generators post the first connection are charged for these unless the enabling works are necessary for all generators.	No comment from the workgroup.
Generator “splits” whereby part of a generation unit is sold to another party and subsequently requires a new Bilateral Connection Agreement between NGESO and the Generator;	A new BCA and/or replanting should not in and of itself drive re-consideration of whether assets are pre-existing or not.	A producer is a person or legal entity not a generating unit, therefore the signing of a new BCA would mean a producer connecting to pre-existing assets and therefore this should drive re-consideration.
Generator “splits” whereby part of a generation unit is novated to another party	If there is a novation of agreements a new BCA is not required i.e. the name of the party is changed on the existing BCA.	If there is a novation, no new BCA is required.



The treatment of negative local circuit tariffs.	Negative local circuit tariffs should be assessed under the same principles as above.	The Workgroup agreed with the Proposer's statement that negative local circuit tariffs should not be treated differently.
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**Workgroup Consultation Question:** Do you consider there to be any specific changes to a BCA that may trigger the reclassification of assets? If so, please provide your rationale.

## **Business Rules**

The Proposer drafted a series of Business Rules to assist in the formulation of the proposed solution. The Proposer considered that these could form an Appendix within Section 14 of the CUSC and would provide further clarity and allow all parties to understand the process that the Proposer would follow and, if appropriate, seek to change them in the future via a CUSC modification proposal as any such Appendix would still fall within CUSC governance.

## **Determining Pre-Existing Assets and Non Pre-Existing Assets**

1. To maintain compliance with the Limiting Regulation The Company will ensure that within the Adjustment Tariff setting process in 14.14.5 (v) Total Generator Charges will include charges for Pre-Existing Assets (PEA) contained within local charges.
2. For each charging year The Company will apportion the total amount of revenue recovered through local charges into charges related to "Pre-Existing Assets" (PEA) and charges related to "Non Pre-Existing Assets" (NPEA).
3. The Company will assign charges to each category at the time of tariff setting.
4. The categorisation of charges will be reviewed annually at the end of the charging year. This will ensure that any change to asset function for example assets being withdrawn or those assets required to connect an individual Generator to the system being deployed for a different purpose (i.e. the introduction of demand) is appropriately reflected in the categorisation.
5. Only charges for NPEA will be excluded from the calculation of the Adjustment Tariff.
6. Only charges for NPEA will be excluded from the calculation of ex-post compliance with the Limiting Regulation detailed in 14.17.37.
7. Local charges will be considered charges for PEA where these relate to assets that existed prior to the execution of the Bilateral Connection Agreement (BCA) unless there is a minor change to the BCA such as a change of legal entity, or a Modification Application whereby changes detailed within the Modification Application result in further work to local assets.
8. Local charges will be considered NPEA where these relate to assets that were built for the purposes of connecting a Generator or upgrading the connection of a Generator.
9. The Company will isolate the TEC value for each Generator associated with NPEA, and the local circuit tariffs associated with NPEA, to calculate the correct values.



### **Local tariffs**

- a. In cases where all the assets within a local network fall into NPEA then the full value of the local tariff will be used as the NPEA tariff. (i.e. offshore circuits, sole use assets, shared enabling works)
- b. In cases where there are multiple assets within a local network that have differing classification, then the local tariff for a specific Generator site will be apportioned based on the relevant MWkM associated with each element of the tariff. I.e. if a PEA made up 3MWkM of the tariff and the remaining NPEA made up 2MWkM then the NPEA would attract 2/5 of the value of the local tariff.

### **TEC**

- c. When calculating the local charge for a Generator, its TEC is used as the charging base.
- d. The TEC value for a Generator associated with its NPEA will be isolated from its total TEC, and is called its NPEA TEC.
- e. The local charge derived from NPEA TEC and NPEA tariffs is the NPEA charge, and will be excluded from the calculation of compliance with the Limiting Regulation.
- f. Local charges other than the NPEA charge will be deemed as PEA charges and will be included in the calculation of compliance with the Limiting Regulation.

It was highlighted by the Proposer that this solution would require additional resource and therefore incur implementation costs. In terms of the identification and categorisation of assets and the potential creation of an asset register, the initial indicative one off cost was estimated to be in the region of circa £500-700k (including 1 Full Time Employee and potentially 4 consultants). Ongoing costs would then reduce to an estimated value of circa £200k per annum.

However, a Workgroup member noted that this was a matter of legal compliance with a Regulation that had been in existence for some 12 years, rather than something new. During this time the ESO (or its predecessor) had been through at least two price controls so it could be the case that the cost of compliance had already been factored into those price control settlements by the ESO / Ofgem. If so, then stakeholders had paid and continue to pay those costs already. The Workgroup member questioned whether these additional £500-700k initial costs and £200k ongoing costs were to also be recovered or whether this would be double counting. The Proposer highlighted that the indicative costs being discussed were in relation to the additional work required for the proposed solution to identify and categorise both assets required for connection, those assets considered to be pre-existing, as well as the potential creation of an asset register. As such, the Proposer expressed that it was highly unlikely there would be any double counting given this would be additional work to that included in any previous business plans and subsequent price control settlements.

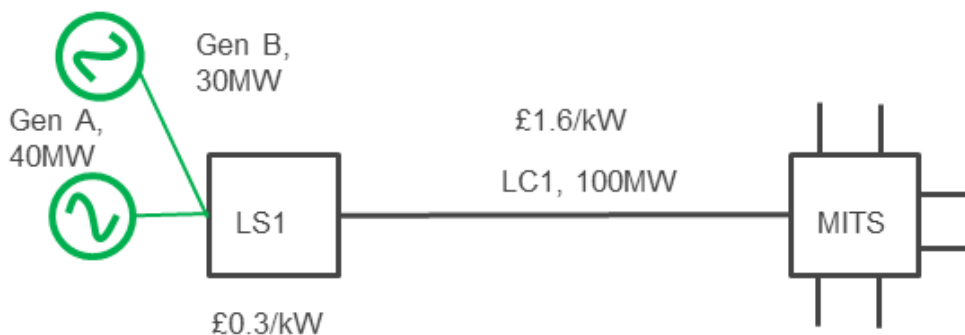
**Workgroup Consultation Question:** Do you think an obligation should be placed on the ESO to publish the outturn value and transparently show the working for calculating the average transmission charge paid by generators (page 15)? Please explain your rationale.

## **Illustrative Examples – Potential Scenarios**

Figures 1-7 (below) illustrate various scenarios that may arise in terms of identifying those charges that are associated with PEA or NPEA; the high-level principles and rules around how pre-existing local assets may be assigned; and how the associated charges would be allocated.

1. Scenarios for consideration with diagrams, and the proposer/Workgroup's views.
2. In all diagrams, circuits in green are owned by generators and are thus not transmission circuits (in the context of TNUoS local circuit charge, transmission circuits are defined as circuits owned by transmission owners).

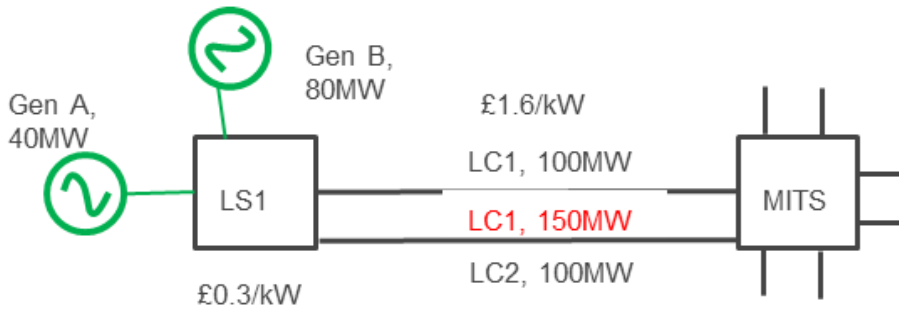
**Figure 1**



In Figure 1 there are 2 potential scenarios:

1. The TO offers and agrees a connection solution to build assets to connect both Generator A and Generator B. In this example, the works would be classed as “shared enabling works” within the BCA and as such assets required to connect, meaning the local charges associated with both generators would fall within the Connection Exclusion.
2. Generator A is already connected. However, at a later point in time, Generator B then wishes to connect. The TO may offer a connection solution to Generator B using the same point (the existing bay) at the local substation which Generator A is already connected to. In this case, the local charges associated with Generator A still fall within the Connection Exclusion as they were required for it to connect. However, the local charges for Generator B would be classed as pre-existing (and would not fall within the Connection Exclusion) as Generator B would be utilising assets that were installed to connect the first generator and were already in use prior to them wishing to connect.

**Figure 2**



In the next example (Figure 2 above) Generator A required both the local substation and local circuit to be built to connect, therefore both sets of charges at this point in time fall within the Connection Exclusion.

At a later date, Generator B then connects but this time a new bay is required at the substation to allow its connection, meaning both Generator A's and B's local substation charges would fall within the Connection Exclusion.

However, as Generator B has agreed 80MW of TEC the existing 100MW local circuit cannot accommodate this increase in capacity without further reinforcements. In this case there are two possible scenarios required to connect Generator B to the system:

- 1) Thermal uprating of the local circuit from 100MW to 150MW or;
- 2) A second 100MW local circuit is built to accommodate the need for the additional capacity.

In both cases this would mean that Generator B is now the “trigger generator” of the local circuit asset reinforcements (either upgrade or new build) which were required to connect Generator B to the system.

The local circuit charges associated with generator A and calculated using the circuit rating of 100MW and single local circuit configuration, would fall within the NPEA; the local circuit charge associated with generator B using the single circuit configuration, would fall within NPEA. The remaining local circuit charges associated with generator A and B, using the local network configuration as in the relevant charging year, would be treated as charges associated with pre-existing assets.

A Workgroup Member highlighted that if a new generator connects to a pre-existing local circuit, or an existing bay in an existing local substation, then no parts of those local assets are required for connection. Even if the capacity of parts of those local assets is increased, or additional new local circuits are built, none of those new network assets were required to connect the new generator. A generator could have connected to the local assets without those additions, even if it may have needed to be curtailed to manage local congestion. This interpretation is consistent with the approach currently used when connecting generators to the GB Distribution network on a financially non-firm basis and this principle is also applied to the GB Transmission network through the approach of Connect and Manage, a UK Government policy implemented some ten years ago which has not been repudiated or reversed by the UK Government, or Ofgem or the ESO. They further suggested that the Limiting Regulation exclusion reference to “upgrade of the connection” is only relevant for upgrades to assets that are required for connection, so if the assets are not required for connection, then it should not be relevant whether, or not they may have been part of an upgrade.

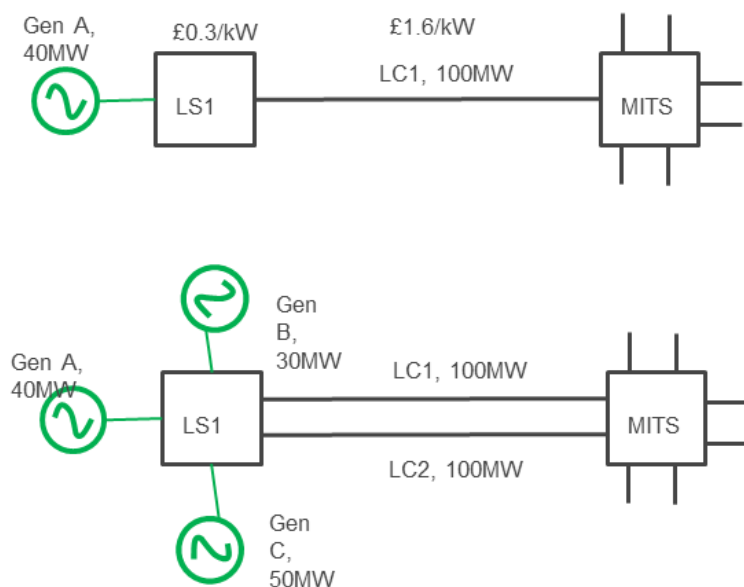
The Workgroup member also explained that the Limiting Regulation exclusion reference to “upgrade of the connection” is not relevant for these incremental network costs, because the relevant local assets being upgraded are pre-existing, so are not and never were part of the connection or required for the connection of the generator in question.

**Workgroup Consultation Question:** How should charges be treated relating to upgrades to local assets? Please explain your rationale.

- Only exclude charges for new upgrades that are paid by a new generator.
- Exclude charges paid for the new upgrades that are paid by both existing and new generators.
- Do not exclude any cost related to new upgrades because the upgrade to pre-existing assets was not required to connect the new generator.
- Other

### Figure 3

In the first diagram below, Generator A is already connected to the system but requests to increase its TEC from 40MW to 120MW. This triggers the need for the current 100MW local circuit to be uprated to 120MW. As the Generator in question is the only user triggering this required reinforcement work then the local circuit charge associated with the full 120MW of TEC (including both the initial 40MW at first connection and the additional 80MW upgrade) would fall within NPEA.

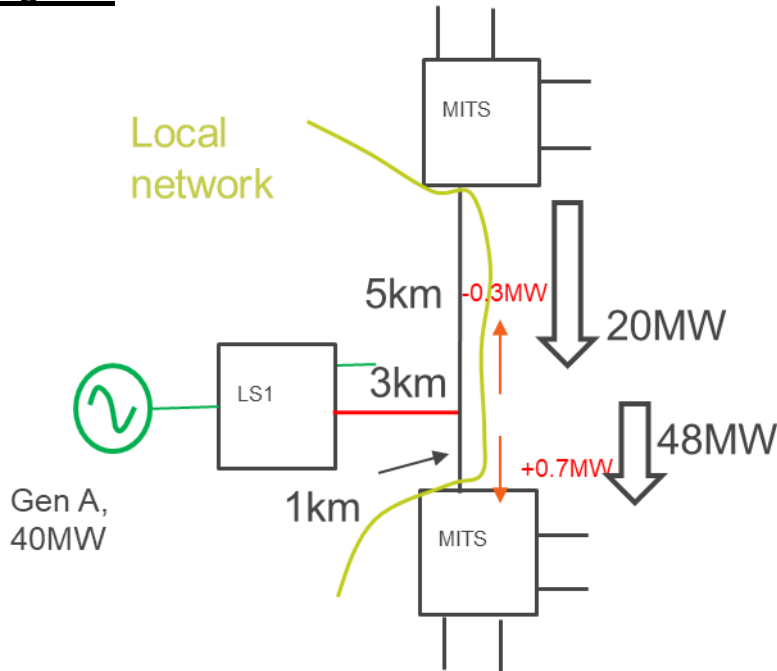


In the second diagram, an additional 100MW local circuit is built for Generator A to accommodate the increase in TEC to 120MW (rather than the option to uprate the existing circuit - detailed in the first example). In this case both local circuit charges would be classed as secured enabling works for Generator A and therefore would fall within NPEA.

However, after the assets are built, Generator A then requests to reduce its TEC to 40MW and both Generator B and C connect to new bays at the substation but without the need for any additional reinforcements to the local circuits due to the spare capacity now available (from Generator A's TEC reduction). In this scenario, the local substation charges for all Generators would fall within NPEA as all Generators required these assets to be

built to connect. However, the local circuit charges relating to Generator B and C would be classed as PEA as they would be utilising assets already in existence/built at the point in time they wished to connect to the system.

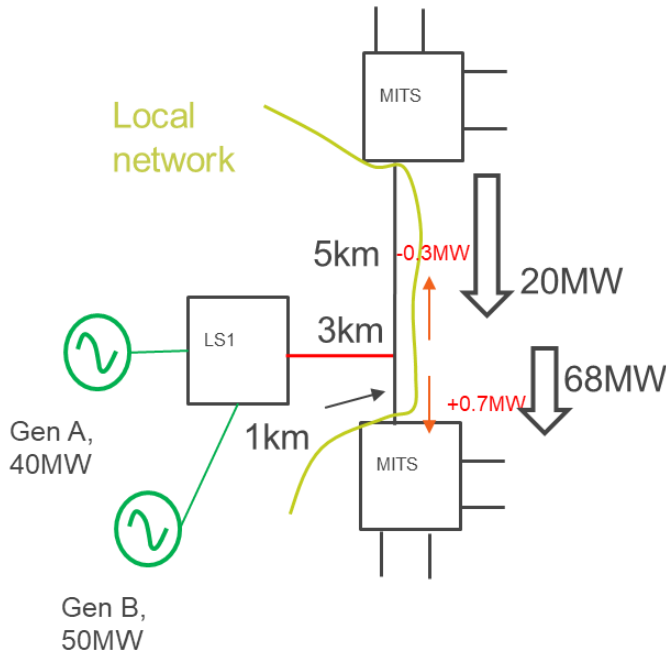
**Figure 4**



In the fourth diagram, the 3km of circuit section (in red) is built to connect generator A into the system. The two circuit sections in black, at 5km and 1km respectively, were part of the wider network prior to connection of generator A, and now become part of the local network.

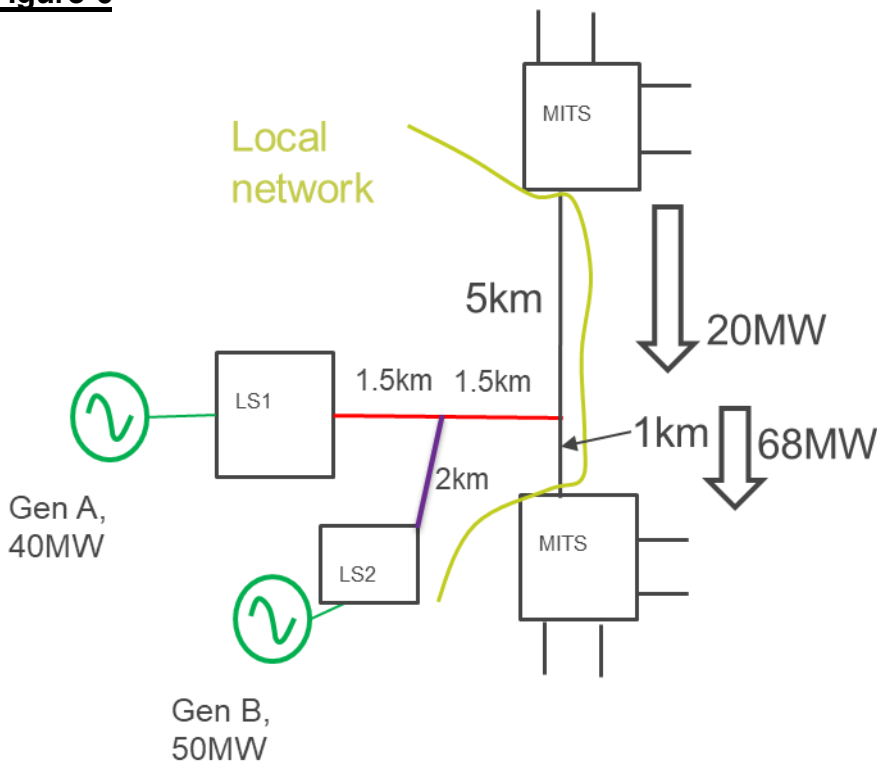
As the circuit sections in black were in the network when generator A wishes to connect, they are treated as PEA. The 3km of new section is an asset required for generator A's connection. The local circuit tariff will need to be broken down into two parts to reflect tariff elements associated with NPEA, and PEA. By applying the local circuit methodology (the incremental MWkm method), the local circuit tariff associated with the red section is  $3\text{km} * 1\text{MW} = 3\text{MWkm}$ , while the local circuit tariff associated with the black sections is  $5\text{km} * (-0.3\text{MW}) + 1\text{km} * 0.7\text{MW} = -0.8\text{MWkm}$ .

**Figure 5**



In the fifth diagram, after generator A (and the 3km of new circuit section) is energised, generator B also apply for a connection at the non-MITS substation LS1. Although both generators have the same local circuit tariff (as they connect at the same non-MITS substation), part of the local charge collected from generator A reflects the 3km of asset built for generator A (40MW) and should be treated NPEA; all local charges collected from generator B are charges associated with PEA.

**Figure 6**

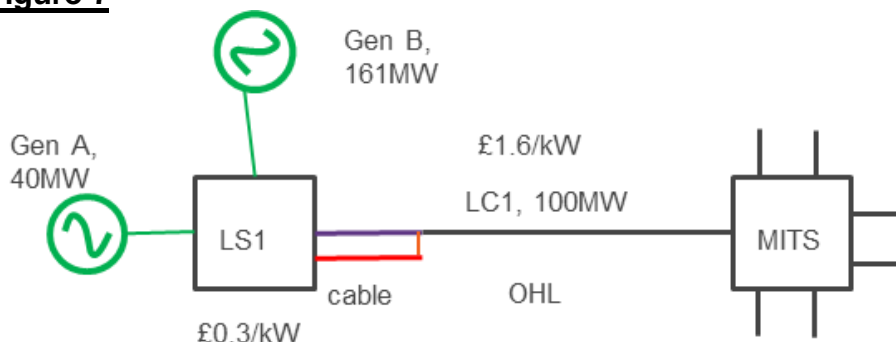


In the sixth diagram, the circuit sections in red were built for generator A. Later generator B asked for a connection, and the purple circuit was built for generator B. Therefore, local charge associated with NPEA for generator A is the local tariff reflecting 3km of red section; and local charge associated with NPEA for generator B is the local tariff reflecting 2km of



purple section. Local charges collected from generators A and B, after deducting the amounts of NPEA for them, will fall within PEA.

**Figure 7**



In the seventh diagram, the local circuit (between LS1 and the nearest MITS) has a small section of cable (about 300m), shown in purple, that links the overhead line to the substations. Generator A is the existing generator, and local circuit LC1 was built to connect generator A to the NETS. Local charges for generator A are NPEA.

Now generator B applies for a connection, and the related reinforcement work is to double up the small section of cable (shown in red). In theory, the asset in red is new asset built for generator B, however, when building the circuit model for TNUoS tariff calculation, this reinforcement work is not explicitly captured in circuit modelling (as the circuit before and after reinforcement will have negligible parameter changes apart from thermal rating change), therefore local charges collected from generator B will all be treated as PEA.

### **Issues relating to “interconnectedness”**

A Workgroup member noted that the CMA decisions noted, at paragraph 6.99(c)<sup>11</sup>, the following regarding issues related to ‘interconnectedness’:

*“The ITC Regulation [this is the Limiting Regulation] does not rule out the possibility that assets required by individual Generators for connection to the system could become assets deployed in the system for different purposes.*

*If the function of assets, initially required by any such Generators for connection to the system, did change in this way, the charges applied for such assets may no longer fall within the Connection Exclusion, depending on the particular facts arising...Relevant factors may include the degree of interconnectedness between assets, and possibly also between Generators, suppliers and other users. However, these matters are complex and call for highly specialist technical expertise and the exercise of judgement by reference to the particular facts of the case.”*

A Workgroup member highlighted that there are a few ways that ‘interconnectedness’ (as used by the CMA) could be taken into account when addressing the question of pre-existing assets:

<sup>11</sup> Pages 139-140.

- Option 1:** Only exclude charges for transmission network assets that are new (not pre-existing) and form a part of a single user generator only spur (GOS). This uses an objective test that any non-zero amount of interconnectedness is sufficient to change the purpose of the network assets in question. Even if those assets may have initially been required for a generator's connection, the fact that they have become interconnected means that they have become deployed in the transmission system for a different purpose, so the charges for such assets no longer fall within the Connection Exclusion. This provides an objective and autonomous definition of "enough interconnection". The only assets for which the ESO would need to apply the "pre-existing" test would be single user generator only spurs, which would greatly reduce the cost of resource and time required by the ESO to identify which assets are, or are not pre-existing. It would have the additional benefit of avoiding any need for ESO to carry out complicated calculations to arbitrarily attribute incremental network costs between different generators.
- Option 2:** Choose a degree of interconnectedness to qualify as "enough interconnectedness". This may include definitions such as two or more network branches, two or more generators, or at least one generator and a source of demand, it could borrow the same definition that the GB CUSC uses to define a MITS node, or use some other definition. A problem with this approach is that the choice of "enough interconnection" would be subjective and arbitrary whilst not providing an autonomous definition of interconnectedness for compliance with the Limiting Regulation.
- Option 3:** The CMA identified in paragraph 6.99(c), that there may be other relevant factors than just the possibility of the degree of interconnectedness between assets.
- Option 4:** Conclude that neither interconnectedness nor any other appropriate factor is relevant for the definition of the Connection Exclusion. The Authority decision suggested that changes in the function of the connection assets do not change the treatment of the charges for those assets in the context of the Connection Exclusion.

The Proposer believes that an appropriate level of interconnectedness is assets becoming part of the MITS and thus the Original would adopt the same definition as the MITS.

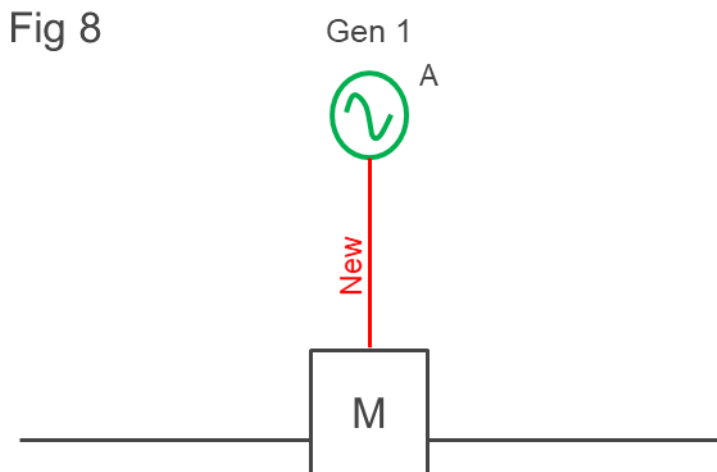
However, some Workgroup members had opposing views to this; noting, for example, that both Ofgem and the CMA had agreed on the transmission system, to which a connection is made, is the NETS not the MITS (as the Proposer had unsuccessfully argued with CMP317/327 Original); and the below diagrams were to aid discussion over what "degree of interconnectedness" would cause a change to whether charges applied to assets would no longer fall in the Connection Exclusion.

**Workgroup Consultation Question:** Four different options are given on page 22 of the Workgroup Consultation, two of which demonstrate different interpretations of "interconnectedness". that the CMA identified. Figures 8-11 provide simple examples to help define what network assets should have their charges captured within the

Connection Exclusion. Which of the two options (1 or 2) for “sufficient interconnectedness” do you agree with, and why?

**Workgroup Consultation Question:** Option 3 (page 22) notes that the CMA says there may be other relevant factors - do you think any other factors should be taken into account, and if so, what?

**Figure 8**



In Figure 8, it was clear that circuit AM would fall within the Connection Exclusion as it was built for and served purely Generator 1. Workgroup members agreed that if substation M already existed then local substation charges paid by Generator 1 would be outside the Connection Exclusion as they would be considered pre-existing, but if it were built to connect Generator 1 to the existing network then it would fall within the Connection Exclusion.

The Workgroup discussed whether the treatment of circuit AM would change if:

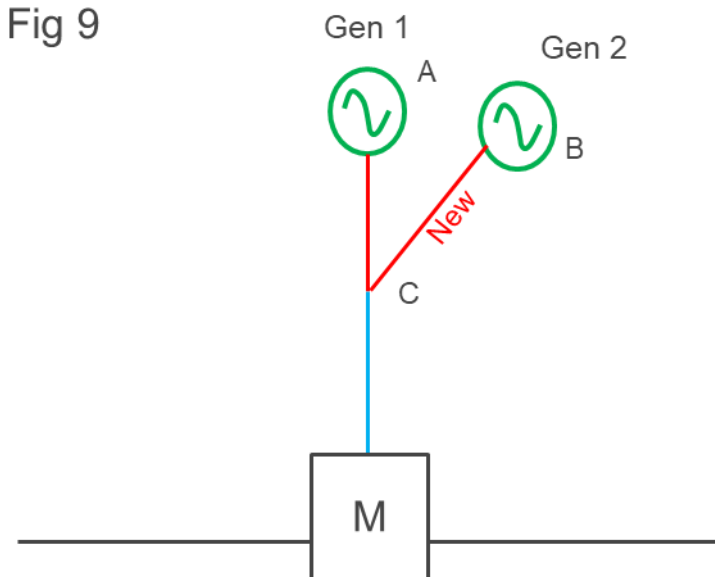
- (a) final demand; or
- (b) storage were to connect at node A.

One Workgroup member suggested that storage was treated as a Generator within the CUSC, therefore in case (b) this would not change the status of AM for Generator 1, but if final demand connected then the “system” should be redefined to include AM within it and therefore charges paid relating to AM by Generator 1 would cease to be in the Connection Exclusion. The reason for this was that final demand was not a “producer” and the existence of demand at A meant asset AM would cease to be required solely for connection of Generator 1 to the wider system, i.e. the existence of demand and generation at the same node was a sufficient degree of interconnectedness to trigger a difference in treatment.

Other Workgroup Members noted that storage acts equally as demand and generation, so could cause flows in the direction MA and that this should deem circuit AM to be outside the Connection Exclusion in both cases (a) and (b). It was suggested that there

was also a strong case for arguing that charges paid by Generator 1 for circuit AM should remain in the Connection Exclusion even if final demand later connected at A, as the circuit AM was originally built for Generator 1.

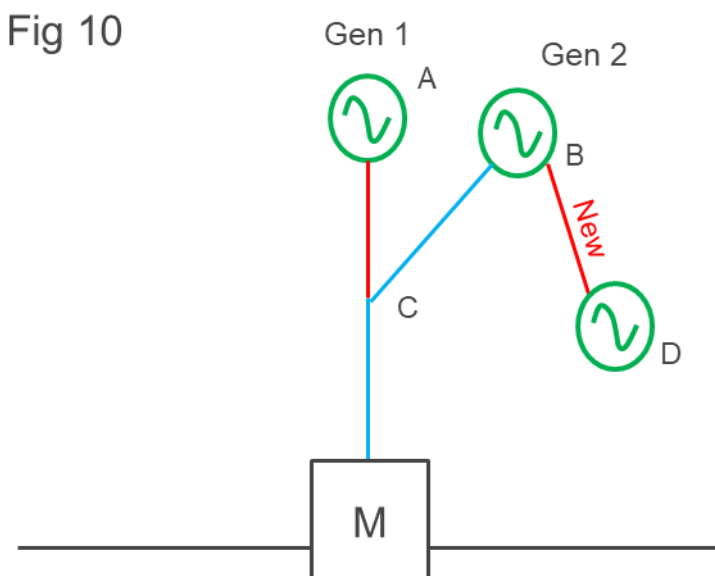
**Figure 9**



In Figure 9, a Workgroup member suggested that local charges paid by Generator 2 for circuit CM should be outside the connection exclusion because it was a PEA, but local charges paid by Generator 1 for circuit CM should remain inside the connection exclusion.

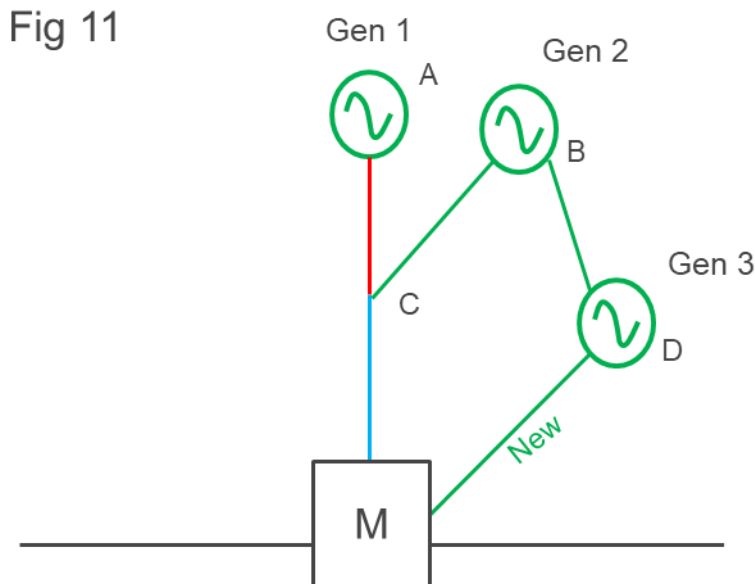
Another Workgroup member felt that CM had become interconnected by virtue of it being connected to two Generators and this was sufficient to exclude local charges paid by Generator 1 for CM to be outside the Connection Exclusion.

**Figure 10**



In Figure 10, a Workgroup member suggested that the principles of Figure 9 could be simply extended, but another Workgroup member deemed the circuit BCM to be interconnected and this would cause all local charges associated with Generator 1, Generator 2 and Generator 3 to be outside the Connection Exclusion.

**Figure 11**



In Figure 11, a Workgroup member suggested suggests that if a new piece of network DM is constructed then this changes the treatment of charges for BD, BC and CM for all generators connecting ultimately to M as regards the Connection Exclusion. This is because power from A can only flow along AC to reach demand, but power from B C and D has more than one route to demand. More than that, an amount of power already in the wider network will flow through MCBDM as well as through the busbar at M, and the fundamental premise behind the Limiting Regulation was that generators should not be paying for network that other remote users (including demand) are using even if only infinitesimally.

Therefore, the Workgroup member believes that it doesn't matter why DM is constructed: it could be for an expansion of G2 or G3, a new generator G4, or because demand has appeared somewhere in the lines connected to M and so DM is needed for additional security. The link DM causes an interconnected network to form and this takes charges for the whole of MCBDM for all generators outside the Connection Exclusion.

### **RIO-2 Price Control Financial Models**

The Proposer also discussed with the Workgroup a potential alternative, which is to utilise data that already exists within the onshore TOs' Price Control Finance Models (PCFM), that is published by Ofgem annually. The PCFM contains the annual revenue allowance, and input data on which the revenue figure is derived. One of the input data items is "GCE" (Generation connections volume driver) which represents the additional allowance (in addition to pre-agreed baseline business plan values) that onshore TOs can have by

connecting additional generation into their network. The alternative option is based on the assumption that a portion of total onshore local charges is associated with non pre-existing assets, and that this portion can be derived by comparing the GCE with the total revenue across all three onshore TOs. A Workgroup member noted that this approach would need to be considered in light of the CMA's statement, regarding the 'degree of interconnectedness', as the approach may not fully reflect the interconnectedness.

**Workgroup Consultation Question:** The Proposer is considering a potential alternative to utilise data that already exists within the onshore TOs' Price Control Finance Models (PCFM) (page 25-26), attached in Annex 5. This based on the assumption that a portion of total onshore local charges is associated with non pre-existing assets, and that this portion can be derived by comparing the Generation Connections Volume Driver with the total revenue across all three onshore TOs. Do you support this option? Why?

## **Section 14 - Charging Methodology Changes proposed by CMP369**

- Changes to update the legal text within Section 14.14.5 and 14.17.37 to align the forecast and actual output (GO & GOA ) elements used for tariff and ex-post reconciliation calculations to the new definitions
- Changes to update the legal text within Section 14.14.5 and 14.17.37 to align the forecast and actual charges (GCharge) elements used for tariff and ex-post reconciliation calculations to the new definitions

## **Draft legal text**

### **CMP368**

Changes to Section 11 of the CUSC as follows (the changes are shown in **red text**):

**“Charges for Physical Assets Required for Connection”:** ~~Connection Charges and Includes TNUoS local charges paid by Generators in respect of Non Pre-Existing Assets but excludes TNUoS local charges paid by Generators relating to Pre-Existing Assets an Onshore local circuit, Onshore local substation, Offshore local circuit and Offshore local substation.~~

**“Non Pre-Existing Assets”:** those local assets determined in accordance with the Appendix in Section 14.30 of the CUSC in respect of an Onshore local circuit, Onshore local substation, Offshore local circuit and Offshore local substation (whether shared / shareable or otherwise) that were required to be built or upgraded for the purposes of connecting the Generator in question to the NETS.

**“Pre-Existing Assets”:** those local assets determined in accordance with the Appendix in Section 14.30 of the CUSC in respect of an Onshore local circuit, Onshore local substation, Offshore local circuit and Offshore local substation (whether shared / shareable or otherwise) which existed at the point at which the Generator in question wished to connect to the NETS. The point in time as to when a Generator wished to connect and consequently what a Pre-Existing Asset is (and which is therefore considered part of the NETS), is determined by reference to the local assets that existed prior to the dates the relevant Bilateral Connection Agreements for the Generator in question were executed with The Company.

**“GB Generation Output”:** total Output of GB generation liable for the TNUoS generation charge, excluding the associated volumes (MWh) relating to TNUoS-liable Embedded Generators who are party to a Bilateral Embedded Generation Agreement.



**“Forecast TNUoS Charges paid by Generators”**: the total forecast TNUoS charges to be recovered from Generators in the charging year minus Charges for Physical Assets Required for Connection and excluding TNUoS Charges payable by TNUoS-liable Embedded Generators who are party to a Bilateral Embedded Generation Agreement.

**“Actual Transmission Generator TNUoS Charges”**: Actual TNUoS charges to Generators in the previous charging year minus Charges for Physical Assets Required for Connection and excluding TNUoS Charges payable by TNUoS-liable Embedded Generators who are party to a Bilateral Embedded Generation Agreement.

**Workgroup Consultation Question**: Do you agree with the proposed definitions of non pre-existing assets ‘NPEA’ and pre-existing assets ‘PEA’?

### Workgroup discussion on legal text

The Workgroup suggested the use of the words ‘Transmission charges’ in the legal text, instead of ‘TNUoS charges’. The ESO considered the use of ‘TNUoS charges’ is more appropriate as this aligns with terminology used in the Authority’s CMP317/CMP327 decision, which states *‘Remove from the calculation determining compliance with the range the TNUoS Charges payable by ‘Large Distributed Generators’ and their associated volumes (MWh)’*. However, some Workgroup members thought that using ‘Transmission charges’ in the legal text would be more appropriate as this would ensure compliance with the Limiting Regulation.

**Workgroup Consultation Question**: Do you agree that the legal definitions in the Original Proposal should be limited to TNUoS charges only or include all transmission charges?

### CMP369

A new paragraph to be inserted within Section 14.14.5:

~~\_ vii) Charges for Physical Assets Required for Connection will be determined by The Company in accordance with the methodology detailed within the Appendix in Section 14.30: Classification of Pre-Existing Asset and Non Pre-Existing Asset local charges for the purposes of maintaining compliance with the Limiting Regulation.~~

Changes to Section 14.14.5 vii.) viii.) of the CUSC as follows (changes shown in red text):

GO = Forecast **GB Generation Output** ~~for generation liable for Transmission charges (i.e. energy injected into the transmission network in MWh)~~ for the charging year.

GCharge (Forecast) = ~~The total forecast TNUoS revenue to be recovered from Generators in the charging year minus Charges for Physical Assets Required for Connection.~~ **Forecast Transmission Generator TNUoS Charges**

Changes to Section 14.17.37 i) of the CUSC as follows:

GO<sub>A</sub> = Actual **GB Generation Output** ~~generator output~~ in the previous charging year

GCharge (Actual) = **Actual Transmission Generator TNUoS Charges** ~~Actual charges to Generators in the previous charging year.~~

**Workgroup Consultation Question:** Do you agree that the legal text delivers the intent of the Original Proposal?

## What is the impact of this change?

### Proposer's assessment against Code Objectives

#### CMP368

Proposer's assessment against CUSC Non-Charging Objectives	
Relevant Objective	Identified impact
(a) The efficient discharge by the Licensee of the obligations imposed on it by the Act and the Transmission Licence;	<b>Positive:</b> updates the definition of Physical Assets Required for Connection (the 'Connection Exclusion') and clearly defines 'GB 'Generation Output' and Generator charges used within the calculation determining compliance with the Limiting Regulation range to ensure alignment with the Authority interpretation
(b) Facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity;	<b>None</b>
(c) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency *; and	<b>Positive:</b> better provides for the GB alignment with European legislation
(d) Promoting efficiency in the implementation and administration of the CUSC arrangements.	<b>None</b>
*Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).	

#### CMP369

Proposer's Assessment against CUSC Charging Objectives	
Relevant Objective	Identified impact
(a) That compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;	<b>None</b>

(b) That compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard licence condition C26 requirements of a connect and manage connection);	<b>None</b>
(c) That, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission businesses;	<b>Positive:</b> allows NGESO to take account of developments driven by the Authority's CMP317/327 decision
(d) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency *; and	<b>Positive:</b> ensures compliance with Regulation 838/2010 which was introduced via EU Regulation 2009/714
(e) Promoting efficiency in the implementation and administration of the system charging methodology.	<b>Positive:</b> updates Section 14 of the CUSC to align with changes introduced via CMP368.
*Objective (d) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).	

**Standard Workgroup consultation question:** Do you believe that CMP368 Original proposal better facilitates the Applicable Objectives?

**Standard Workgroup consultation question:** Do you believe that CMP369 Original proposal better facilitates the Applicable Objectives?

## When will this change take place?

### Implementation date

This modification should be implemented on the 1 April 2022.

### Date decision required by

A decision is required by 31 October 2021 as this will allow the definitions proposed within these modifications to be adopted by NGESO when setting tariffs for the 2022/23 charge year and for use in the ex-post reconciliation methodology to reconcile charges for charging year 2021/22 in 2022/23 if required.

**Implementation approach**

NGESO will use the definitions created by this modification proposal to amend charges thereby altering the amount that the Adjustment Tariff for Generators and residual charge for Suppliers recovers from 1 April 2022.

**Standard Workgroup consultation question:** Do you support the implementation approach?

**Interactions**

- |   |   |  |                                |
|---|---|--|--------------------------------|
| <input type="checkbox"/> Grid Code              | <input type="checkbox"/> BSC                                | <input checked="" type="checkbox"/> STC      | <input type="checkbox"/> SQSS  |
| <input type="checkbox"/> European Network Codes | <input type="checkbox"/> EBGL Article 18 T&Cs <sup>12</sup> | <input type="checkbox"/> Other modifications | <input type="checkbox"/> Other |

CMP368 and its proposed definition changes has an interaction with CMP369 which is being proposed alongside this modification and that updates Section 14 of the CUSC to align the charging methodologies to the updated definitions.

These modifications are not expected to impact on the EBGL Article 18 T&Cs<sup>13</sup>

To facilitate the final solution the ESO may need to raise a change proposal to the STC to receive additional data from the relevant TOs. The data from relevant TOs are needed to verify whether an asset was actually built in the relevant charging year. This is in addition to the existing TNUoS process which utilises ETYS circuit data and BCAs (which contain some information that revenue team need to manually build “fictitious” circuits into the TNUoS model under the contractual generation background).

<sup>12</sup> If the modification has an impact on Article 18 T&Cs, it will need to follow the process set out in Article 18 of the European Electricity Balancing Guideline (EBGL – EU Regulation 2017/2195) – the main aspect of this is that the modification will need to be consulted on for 1 month in the Code Administrator Consultation phase. N.B. This will also satisfy the requirements of the NCER process.

<sup>13</sup> If your modification amends any of the clauses mapped out in Exhibit Y to the CUSC, it will change the Terms & Conditions relating to Balancing Service Providers. The modification will need to follow the process set out in Article 18 of the European Electricity Balancing Guideline (EBGL – EU Regulation 2017/2195) – the main aspect of this is that the modification will need to be consulted on for 1 month in the Code Administrator Consultation phase. N.B. This will also satisfy the requirements of the NCER process.

## How to respond

### **CMP368 Standard Workgroup consultation questions**

1. Do you believe that CMP368 Original proposal better facilitates the Applicable Objectives?
2. Do you support the proposed implementation approach?
3. Do you have any other comments?
4. Do you wish to raise a Workgroup Consultation Alternative request for the Workgroup to consider?

### **CMP369 Standard Workgroup consultation questions**

5. Do you believe that CMP369 Original proposal better facilitates the Applicable Objectives?
6. Do you support the proposed implementation approach?
7. Do you have any other comments?
8. Do you wish to raise a Workgroup Consultation Alternative request for the Workgroup to consider?

### **Specific Workgroup consultation questions**

9. The Proposer is proposing that the both the volumes and charges of Large Distributed Generators are excluded in the compliance calculation, whereas the potential alternative proposes that only the volumes are excluded. Which option do you support and why?
10. Station demand charges (TNUoS Triad charges on power station demand) would, with the original, be excluded, however the potential alternative would include them. Which option do you support and why?
11. The Original proposal would not change the current treatment of transmission charges or the associated volumes relating to storage when assessing compliance with the Limiting Regulation. Do you agree with this approach, and if so why?
12. Do you believe that both generation charges and volumes of storage assets should be included in the compliance calculation (page 11)? Does this depend on whether the storage is transmission or distribution connected? Please provide your rationale.
13. What do you think is the appropriate time stamp for defining whether a network asset is “pre-existing” (page 11)? E.g. when a generator wished to connect, was the network asset:
  - f. Already planned to be built
  - g. Already committed to be built
  - h. Already under construction
  - i. Finished construction
  - j. Commissioned and fully operational
14. Do you consider there to be any specific changes to a BCA that may trigger the reclassification of assets? If so, please provide your rationale.
15. Do you think an obligation should be placed on the ESO to publish the outturn value and transparently show the working for calculating the average transmission charge paid by generators (page 15)? Please explain your rationale.
16. How should charges be treated relating to upgrades to local assets? Please explain your rationale.
  - k. Only exclude charges for new upgrades that are paid by a new generator.

- l. Exclude charges paid for the new upgrades that are paid by both existing and new generators.
  - m. Do not exclude any cost related to new upgrades because the upgrade to pre-existing assets was not required to connect the new generator.
  - n. Other
17. Four different options are given on page 22 of the Workgroup Consultation, two of which demonstrate different interpretations of “interconnectedness”. that the CMA identified. Figures 8-11 provide simple examples to help define what network assets should have their charges captured within the Connection Exclusion. Which of the two options (1 or 2) for “sufficient interconnectedness” do you agree with, and why?
18. Option 3 (page 22) notes that the CMA says there may be other relevant factors - do you think any other factors should be taken into account, and if so, what?
19. The Proposer is considering a potential alternative to utilise data that already exists within the onshore TOs’ Price Control Finance Models (PCFM) (page 25-26), attached in Annex 5. This based on the assumption that a portion of total onshore local charges is associated with non pre-existing assets, and that this portion can be derived by comparing the Generation Connections Volume Driver with the total revenue across all three onshore TOs. Do you support this option? Why?
20. Do you agree with the proposed definitions of non pre-existing assets ‘NPEA’ and pre-existing assets ‘PEA’?
21. Do you agree that the legal definitions in the Original Proposal should be limited to TNUoS charges only or include all transmission charges?
22. Do you agree that the legal text delivers the intent of the Original Proposal?

The Workgroup is seeking the views of CUSC Users and other interested parties in relation to the issues noted in this document and specifically in response to the questions above.

Please send your response to [cusc.team@nationalgrideso.com](mailto:cusc.team@nationalgrideso.com) using the response proforma which can be found on the CMP368 & CMP369 [modification page](#).

In accordance with Governance Rules if you wish to raise a Workgroup Consultation Alternative Request please fill in the form which you can find at the above link.

*If you wish to submit a confidential response, mark the relevant box on your consultation proforma. Confidential responses will be disclosed to the Authority in full but, unless agreed otherwise, will not be shared with the Panel, Workgroup or the industry and may therefore not influence the debate to the same extent as a non-confidential response.*



## Acronyms, key terms and reference material

Acronym / key term	Meaning
BSC	Balancing and Settlement Code
CMP	CUSC Modification Proposal
CUSC	Connection and Use of System Code
EBGL	Electricity Balancing Guideline
STC	System Operator Transmission Owner Code
SQSS	Security and Quality of Supply Standards
T&Cs	Terms and Conditions
NPEA	Non Pre-Existing Assets
PEA	Pre-Existing Assets
BEIS	Department for Business, Energy and Industrial Strategy

## Reference material

- [CMP317 and CMP327 Authority Decision Letter](#)
- [SSE Code Modifications Appeal 2021](#)
- [COMMISSION REGULATION \(EU\) No 838/2010](#)
- [Directive \(EU\) 2019/944 of the European Parliament and of the Council](#)
- [Decision on clarifying the regulatory framework for electricity storage: changes to the electricity generation licence \(ofgem.gov.uk\)](#)

## Annexes

Annex	Information
Annex 1	Proposal form
Annex 2	Terms of reference
Annex 3	Ofgem guidance letter on CMP368/CMP369
Annex 4	Query from Workgroup member and Proposer's response (email)
Annex 5	RIO-2 Price Control Financial Models
Annex 6	Compliance calculation spreadsheet
Annex 7	High Level Principles document